Maine CDC/DHHS Update on Novel Influenza A (H1N1) Virus
October 22, 2009

Increased Flu Activity in Maine and the US

The 2009 novel H1N1 influenza virus is the predominant influenza virus in circulation in most countries worldwide. The vast majority of the U.S. is seeing widespread influenza, with nearly all of it being the 2009 novel H1N1 influenza strain.

Outpatient visits for influenza-like illness (ILI) increased in much of New England. Maine continues to see overall increases in outpatient visits for ILI.. Much of this is most likely due to novel H1N1. The vast majority of people with ILI are not being tested, and do not need to be. People with confirmed H1N1 are primarily children and young adults.

The first confirmed person with H1N1 in Aroostook County was reported in the northern part of that county this week. Gould Academy has had 3 students confirmed with H1N1 as well as 2 other students and 2 staff with the symptoms.

Two cases of seasonal influenza have been confirmed this last week in Maine, in individuals in Cumberland and Androscoggin counties. The vast majority of cases in Maine – as well as across the country – are novel H1N1.

H1N1 Vaccine Supply

Vaccine has begun to arrive in Maine and is slowly becoming available. Approximately 21,800 doses of H1N1 vaccine arrived this week, both injectable and nasal spray. This additional supply should bring the total to about 55,500 doses in the state, which are being shipped to registered health care providers immediately.

We estimate that Maine will receive about 340,000 doses of various formulations of H1N1 vaccine by early December (although this estimate could change). There are approximately 700,000 people in Maine who are in the high priority groups for receiving vaccine, out of about 1.3 million people total. We will eventually receive enough vaccine to be able to offer it to all Mainers who want it.

In the meantime, it is important that the vaccine be focused on those in the highest priority groups: **pregnant women; household members and caregivers of infants less than six months old; children ages six months to 25 years; people ages 25-65 with severe underlying conditions, especially respiratory and neurodevelopmental conditions; and health care workers, especially those with frequent direct contact with patients and infectious material who work in hospital emergency departments, pediatric, labor/delivery, and intensive care units. This list means that many people who work in health care settings, first responders, and even those administrating vaccine at this point in time will not be vaccinated. Over the next few weeks, this will change, but it is very important to focus the limited vaccine supplies on where it will be most effective, and that is primarily protecting pregnant women as well as children who are both disproportionately affected by novel H1N1 and are also major transmitters of influenza to others.**

It is important that health care providers who want to have H1N1 vaccine shipped directly to them register as an H1N1 provider and place orders as soon as possible. To register visit http://www.maine.gov/dhhs/boh/maineflu/h1n1/provider-agreement-2009-2010.shtml. Registered providers may find order forms and vaccine reporting forms here: http://www.maine.gov/dhhs/boh/maineflu/h1n1/health-care-providers.shtml.

H1N1 Vaccine Prioritization

The highest priority populations for H1N1 vaccine are children and pregnant women. We are asking that health care providers receiving shipments of this vaccine make sure it is immediately available to schools if they are serving as a distribution site for schools, and that in general, pregnant women and children be prioritized. About 90% of the H1N1 vaccine supply arriving in Maine these first few weeks should be directed to pregnant women

and children. We encourage pediatric providers to collaborate with other practitioners who see relatively few pre-schoolers to ensure access to vaccine.

Because supplies are limited and 40% of the vaccine that is currently available is the nasal spray form that is contraindicated for pregnant women, children under two, and people with health conditions, it is possible that there will not be sufficient supplies of vaccine for even the highest priority people until December.

Maine CDC is providing vaccine to obstetrical health care providers for pregnant women; to pediatric providers for very young and some high-risk children; and the majority of vaccine is going to schools. Several school districts are starting their vaccine clinics for H1N1 on October 26. They include some schools in Portland, Lewiston, and the Augusta area. Some of these clinics are listed on the clinic locator at www.maineflu.gov.

While waiting for your H1N1 vaccine, the best precautions you can take are to avoid close contact with those who are ill and to frequently wash or sanitize your hands.

H1N1 Vaccination Distribution by County as of October 21:

County	Total doses distributed
Androscoggin	5,400
Aroostook	1,800
Cumberland	18,800
Franklin	1,000
Hancock	1,300
Kennebec	5,000
Knox	2,300
Lincoln	800
Oxford	900
Penobscot	6,200
Piscataquis	200
Sagadahoc	100
Somerset	1,000
Waldo	1,000
Washington	1,000
York	8,700

It is important to note that some health care providers receiving vaccine in one county serve patients in other counties. For instance, many people living in Sagadahoc County are served by health care providers in adjacent counties. Additionally, in some counties with a low amount of vaccine, health care providers are in the process of ordering vaccine.

Online School and Public Flu Clinic Calendar

A sortable calendar of public and school clinics can be found at: http://www.maine.gov/dhhs/boh/maineflu/fluclinics/index.shtml. If you are a clinic organizer and need help posting a clinic, please email flu.questions@maine.gov for assistance.

At this point in time, because of the limited supply of H1N1 vaccine in Maine, the public clinics listed on this clinic locator are for people in the very high-risk categories described above. We suggest you look at the clinic details to determine who the particular clinic is focused on. Over the next several weeks, more vaccine will become available, and we expect it to be offered in a number of schools throughout Maine as well in more public clinic settings. All clinics offering H1N1 vaccine that are open to the public (even if only for high priority populations) are required to be posted on this website. We anticipate it may be several weeks before very broad-based public clinics for H1N1 vaccine are available.

Seasonal Flu Vaccine Delay

We received about 20,000 doses of pediatric seasonal flu vaccine early this week, and it was sent directly to schools that have ordered vaccine for clinics. It appears there will be continued delays in obtaining expected seasonal flu vaccine. Very recent information indicates it may be until late November when all the remaining shipments of our seasonal flu vaccine supply will arrive. Privately ordered vaccine has also been reported to be delayed. Currently, the predominant virus is novel H1N1, so it is important to offer children and others at risk the H1N1 vaccine as soon as possible.

Maine CDC H1N1 Activities This Past Week

Calls received by the phone bank.	90
Questions coming into flu.questions@maine.gov	130
Hits on the webpages associated with www.maineflu.gov	21,014
Lab tests we (HETL at Maine CDC) conducted	195
Lab tests we (HETL) conducted total since April.	5,051
Calls coming into the clinical consultation line	115
Maine CDC employees whose jobs do not normally involve anything related to H1N1 who have volunteered with the phone bank and other related efforts	76

New Information for Health Care Providers

- **Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm and Questions and Answers on the new guidance: http://www.cdc.gov/h1n1flu/guidance/control_measures_qa.htm. This new guidance has important information on controlling H1N1 in the health care setting.**

- **Three laboratories can now confirm novel 2009 H1N1 influenza tests with PCR testing: Both ALI (Affiliated Laboratory) and NorDx laboratories in Maine are now able to confirm 2009 H1N1 influenza, in addition to Maine CDC's Health and Environmental Testing Laboratory (HETL).**

- **US CDC issued a Health Advisory on: Early Treatment with Antiviral Medications:** When treatment of influenza is indicated in a patient with suspected influenza, health care providers should initiate empiric antiviral treatment as soon as possible. Waiting for laboratory confirmation of influenza to begin treatment with antiviral drugs is not necessary. Patients with a negative rapid influenza diagnostic test should be considered for treatment if clinically indicated because a negative rapid influenza test result does not rule out influenza virus infection. **The sensitivity of rapid influenza diagnostic tests for 2009 H1N1 virus can range from 10% to 70%, indicating that false negative results occur frequently.** Early empiric treatment with oseltamivir or zanamivir is recommended for all persons with suspected or confirmed influenza requiring hospitalization. Prompt empiric outpatient antiviral therapy is also recommended for persons with suspected influenza who have symptoms of lower respiratory tract illness or clinical deterioration regardless of previous health or age.

  Early empiric treatment should be considered for persons with suspected or confirmed influenza who are at higher risk for complications, even if not hospitalized, including:
  - Children younger than 2 years old
  - Adults 65 years and older
  - Pregnant women
  - Persons with the following conditions: chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological (including sickle cell disease), or metabolic disorders (including diabetes mellitus); disorders that that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders); immunosuppression, including that caused by medications or by HIV;
  - Persons younger than 19 years of age who are receiving long-term aspirin therapy, because of an increased risk for Reye syndrome.

- **Podcast: Antiviral Drugs for the 2009-2010 Influenza Season**
  This podcast discusses the use of antiviral drugs for the treatment and prevention of influenza, including 2009 H1N1, during the 2009-2010 influenza season. Created: 10/19/2009 by Centers for Disease Control and Prevention (CDC).

- **Reporting Possible Vaccine Adverse Events:** A new Web site for the Vaccine Adverse Event Reporting System (VAERS) has been launched and is available at www.vaers.hhs.gov. VAERS is a national program co-managed by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) to monitor the safety of all vaccines licensed in the United States. VAERS is a passive surveillance system that collects and analyzes important information from reported adverse events that occur after vaccination. The system relies on reports from healthcare providers, vaccine manufacturers, and the general public. You may report to VAERS electronically, by mail, or fax. You can also search the VAERS database, via the Web site, for information and summaries on particular adverse events reported for specific vaccines. Please note that VAERS cannot determine if an adverse event was caused by a vaccine, but can help determine if further investigations are needed.

- **Information and Decision Tree for Health Care Providers for H1N1 Vaccine:**
  http://www.flu.gov/professional/hospital/2009vaccinationdecisiontree.html

- **Vaccine allocation and distribution Q&A:**
  http://www.cdc.gov/H1N1flu/vaccination/statelocal/centralized_distribution_qa.htm

- **Updated Q&A on H1N1 vaccine:** http://www.cdc.gov/h1n1flu/vaccination/public/vaccination_qa_pub.htm

- **New flyers** available at http://www.cdc.gov/h1n1flu/freeresources.htm:
  - It Takes Two (English and Spanish) –about H1N1 vaccine dosing for parents of children under 10
  - Fight the Flu for First Responders (English)
  - Flu Can Harm You and Your Baby (English and Spanish) – for pregnant women

- **Clinical features of severe cases of 2009 H1N1 influenza**: WHO hosted a three-day meeting in Washington, DC, to discuss findings and experiences from clinicians, scientists, and public health professionals involved in with managing severe cases of pandemic influenza. Participants agreed that the risk of severe or fatal illness is highest in three groups: pregnant women, especially during the third trimester of pregnancy, children younger than 2 years of age, and people with chronic lung disease, including asthma. Neurological disorders can increase the risk of severe disease in children. Evidence also showed that disadvantaged populations, such as minority groups and indigenous populations, are disproportionately affected by severe disease. Primary viral pneumonia is the most common finding in severe cases and a frequent cause of death. Secondary bacterial infections have been found in approximately 30% of fatal cases. Respiratory failure and refractory shock have been the most common causes of death. While people with certain underlying medical conditions, including pregnancy, are known to be at increased risk, many severe cases occur in previously healthy young people. On the positive side, findings presented during the meeting add to a growing body of evidence that prompt treatment with the antiviral drugs, oseltamivir or zanamivir, reduces the severity of illness and improves the chances of survival. In addition to pneumonia directly caused by replication of the virus, evidence shows that pneumonia caused by co-infection with bacteria can also contribute to a severe, rapidly progressive illness. Bacteria frequently reported include Streptococcus pneumoniae and Staphylococcus aureus, including methicillin-resistant strains in some cases. As these bacterial co-infections are more frequent than initially recognized, clinicians stressed the need to consider empiric antimicrobial therapy for community acquired pneumonia as an early treatment.
  (http://www.who.int/csr/disease/swineflu/notes/h1n1_clinical_features_20091016/en/index.html)

- 2009 H1N1 Flu and Seasonal Flu Information for Rheumatology Health Professionals
  People with immunosuppression, either from their medical condition (e.g. inflammatory rheumatic disease) or due to medications, are at high risk for both seasonal and 2009 H1N1 influenza-related complications.

Specific Information for Pediatric Health Care Providers

- US CDC issued a *Planning Guide for Vaccinating Pediatric Patients Against 2009 H1N1 Influenza in Primary Healthcare Settings (*http://www.flu.gov/professional/hospital/pediatricpatients.html) as well as recommendations for the use of antivirals for children and adolescents (http://www.flu.gov/professional/hospital/pediatricsupplement.html).

- 2009-2010 Influenza Season Triage Algorithm for Children (<= 18 years) With Influenza-Like Illness (PDF) This algorithm was developed for use only by physicians and those under their direct supervision, not for use by general public, to help in discussions and providing advice to parents or other caregivers of ill children regarding seeking medical care for an influenza-like illness. The algorithm can be used regardless of whether or not the child has been vaccinated for influenza. Caregivers of children who may have potentially life threatening signs and symptoms, such as unresponsiveness, or respiratory distress and/or cyanosis (blue-colored skin), should be instructed to dial 911.

- Use of Antiviral Medications for the Management of Influenza in Children and Adolescents for the 2009-2010 Season -- Pediatric Supplement for Health Care Providers Recommendations specific to children and adolescents, based on current recommendations for antiviral use and influenza diagnostic testing recommendations.

- Q&A on opening and mixing Tamiflu® capsules with liquids for children who cannot swallow capsules is available here: http://www.cdc.gov/H1N1flu/antivirals/mixing_tamiflu_qa.htm.

- The U.S. Food and Drug Administration approved use of the seasonal influenza vaccine Fluarix, which had previously been approved for those 18 and older, for children ages 3 years to 17 years: http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm187156.htm

Billing and Insurance Information

- The Maine Bureau of Insurance and Maine insurers have worked together to reduce barriers for health plan members to access the H1N1 vaccine. The Insurance Superintendent has created a web site that allows health care providers to click on a carrier to obtain roster billing forms and other information. http://www.maine.gov/pfr/insurance/H1N1.htm

- The Office of MaineCare Services has roster billing instructions on its web site at: http://www.maine.gov/dhhs/oms/providerfiles/billing_instructions.html

- US CDC issued a Q&A on H1N1 vaccine administration and billing: http://www.cdc.gov/h1n1flu/vaccination/statelocal/vaccing_billing_qa.htm

- Billing codes for administration of H1N1 immunization: 90470 H1N1 vaccine (IM or intranasal) administration, including counseling; and 90663 for H1N1 vaccine administration.

New Information Related to School-based Clinics

A letter from Maine CDC director Dr. Dora Mills and an updated sample parental consent form for H1N1 flu vaccine have been posted at: http://www.maine.gov/dhhs/boh/maineflu/h1n1/educators.shtml

Updated Information for the Public

- The U.S. Food and Drug Administration (FDA) and the Federal Trade Commission (FTC) issued a joint warning letter to a web site marketing fraudulent supplements that claim to help prevent the spread of the 2009 H1N1 influenza virus. (http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm187142.htm and http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm186861.htm)

- 2009 H1N1 Flu and Seasonal Flu Information for People with Inflammatory Arthritis or Rheumatic Disease
  People with certain types of arthritis, called inflammatory or systemic arthritis or autoimmune rheumatic disease, have a higher risk of getting flu-related complications, such as pneumonia.

How to Stay Updated

- **Weekly Updates:** Check the Thursday morning updates on H1N1 in Maine on Maine CDC's H1N1 website. Now available as an RSS feed (midway down the center of the homepage): http://www.maineflu.gov/
- **Health Alert Network:** Sign up to receive urgent updates from Maine CDC's Health Alert Network (HAN). The easiest and quickest way is to sign up is through the HAN Alert RSS feed at www.mainepublichealth.gov (midway down the center of the homepage).
- **Follow Maine CDC's Updates:**
  - **Facebook** (search for "Maine CDC")
  - **Twitter** (http://twitter.com/MEPublicHealth)
  - **MySpace** (www.myspace.com/mainepublichealth)
  - **Maine CDC's Blog** (http://mainepublichealth.blogspot.com)
- **H1N1 Conference Calls:** Maine CDC will be holding conference calls to provide updates and take questions on H1N1. The next call will be held **Monday October 26th from noon to 1 pm**. To participate, call 1-800-914-3396 and enter pass code 473623#. During calls, please press *6 to mute your line and #6 to un-mute when you are actively participating.

Call or Email Us

- For clinical consultation, outbreak management guidance, and reporting of an outbreak of H1N1 call Maine CDC's toll free 24-hour phone line at: 1-800-821-5821.
- General Public Call-in Number for Questions: 1-888-257-0990
  NextTalk (deaf/hard of hearing) - (207) 629-5751
  Monday - Friday 9 a.m. – 5 p.m.
- Email your questions to: flu.questions@maine.gov

Maine Weekly Influenza Surveillance Report

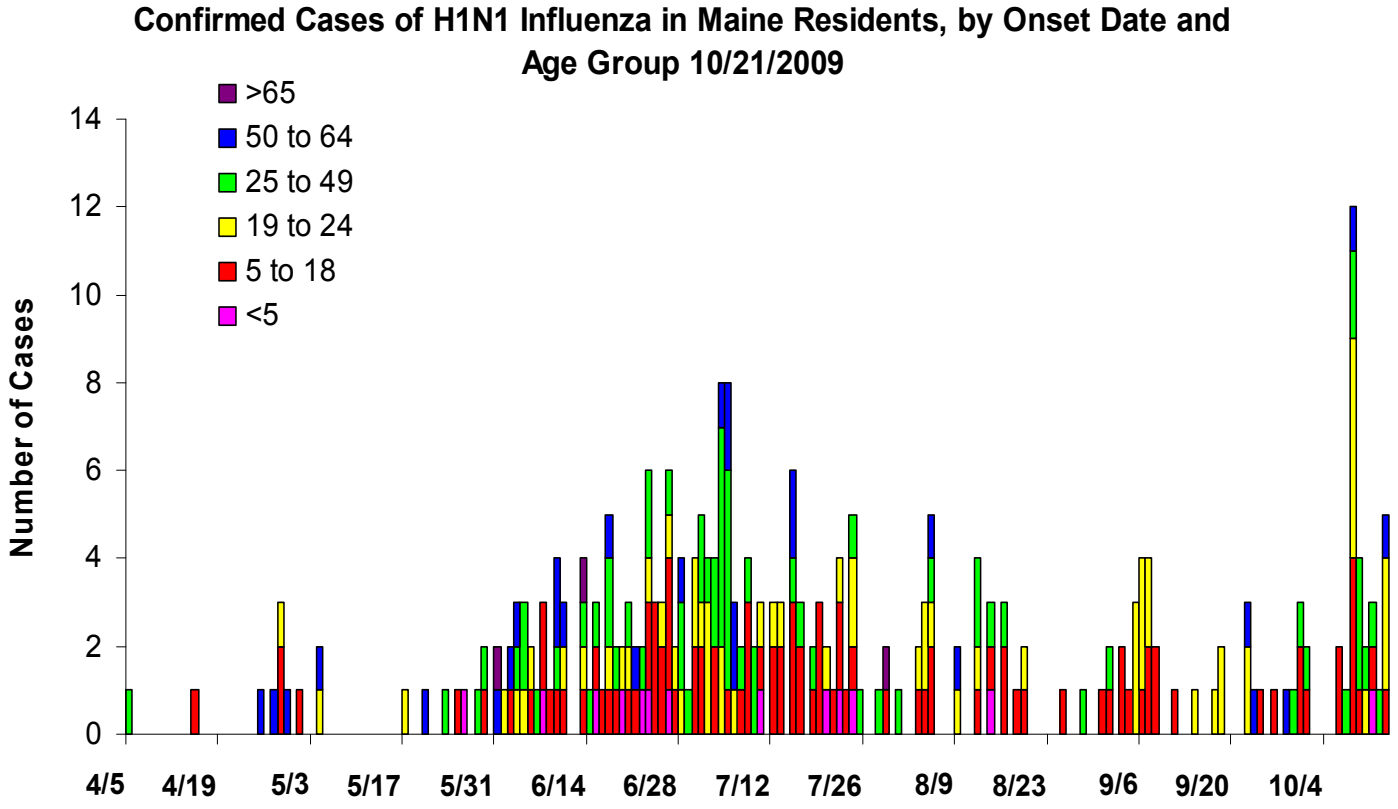
October 21, 2009

Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services
John E. Baldacci, Governor — Brenda M. Harvey, Commissioner

- 487 confirmed and probable cases of H1N1 total to date
  - 325 in Maine residents
    - 16 Maine residents have been hospitalized
  - 162 in out of state residents tested in Maine
    - 5 Out of state residents have been hospitalized in Maine
- 1 death reported to date
- 91% of lab confirmed H1N1 cases in Maine residents and out of state visitors are under the age of 50 (range 0-81 years, mean of 22 years)

Characteristics of Lab Confirmed H1N1 Influenza Cases - Maine Residents, 2009

Age			Gender		At Risk		Hospital Care				Deaths	
Age group	N	%	Male	Female	HCW	Pregnant	Hospitalized	%	ICU	Ventilated	N	%
<5	19	6	14	5	0	0	1	5	0	0	0	0
5 to 18	119	37	66	53	1	0	1	1	0	1	0	0
19 to 24	70	22	28	42	4	0	3	4	0	0	0	0
25 to 49	83	26	32	51	15	2	6	7	1	1	0	0
50 to 64	32	10	17	15	6	0	4	13	2	2	1	3.1
>65	2	1	0	2	0	0	1	50	0	0	0	0
Total	**325**	**~**	**157 (48%)**	**168 (52%)**	**26**	**2**	**16**	**5**	**3**	**4**	**1**	**0.3**



Lab confirmed H1N1 Influenza Cases by County – Maine Residents and Out of State Visitors, 2009

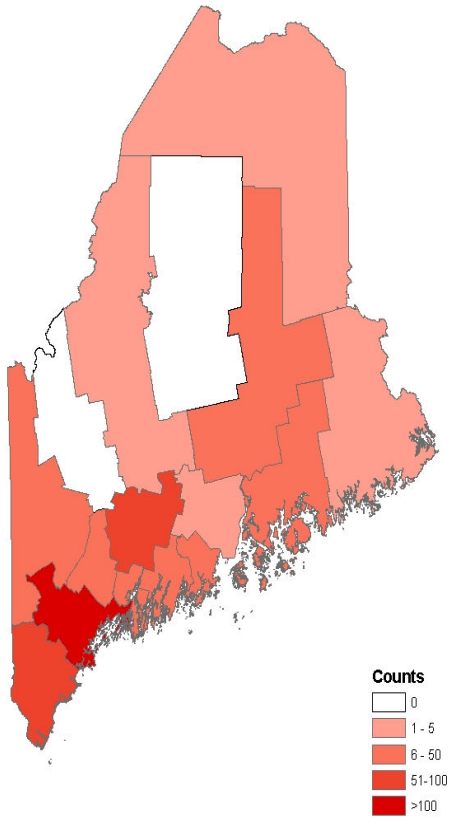
County	Maine Residents	Out of State	Total
Androscoggin	35	9	44
Aroostook	1	0	1
Cumberland	115	65	180
Franklin	0	0	0
Hancock	8	2	10
Kennebec	18	39	57
Knox	3	8	11
Lincoln	16	4	20
Oxford	13	9	22
Penobscot	44	5	49
Piscataquis	0	0	0
Sagadahoc	15	0	15
Somerset	2	2	4
Waldo	1	1	2
Washington	1	0	1
York	53	18	71
Total	**325**	**162**	**487**

Out of state cases are classified by the area in which they are staying (if a summer resident/camper) or the area in which they were tested

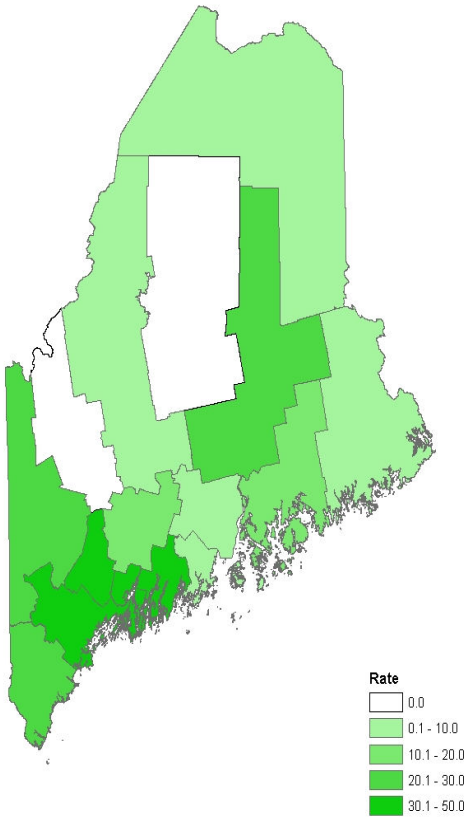
Institutional Settings with Lab Confirmed H1N1, by Count - Maine, 2009

County	School/Day Care	Acute Care	Cong. Living	Camp
Androscoggin	2	0	0	6
Aroostook	0	0	0	0
Cumberland	3	0	2	14
Franklin	0	0	0	0
Hancock	0	0	0	0
Kennebec	0	0	0	9
Knox	0	0	0	4
Lincoln	3	0	1	1
Oxford	1	0	0	3
Penobscot	2	0	0	0
Piscataquis	0	0	0	0
Sagadahoc	0	0	0	0
Somerset	0	0	0	1
Waldo	0	0	1	0
Washington	0	0	0	0
York	1	1	0	2
Total	**12**	**1**	**4**	**40**

Lab Confirmed H1N1, by County – Maine Residents and Out of State Visitors, 2009

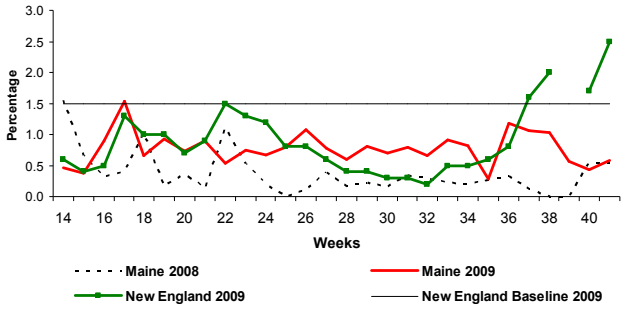


Rate of Lab Confirmed H1N1 Infection per 100,000 People, by County - Maine Residents, 2009

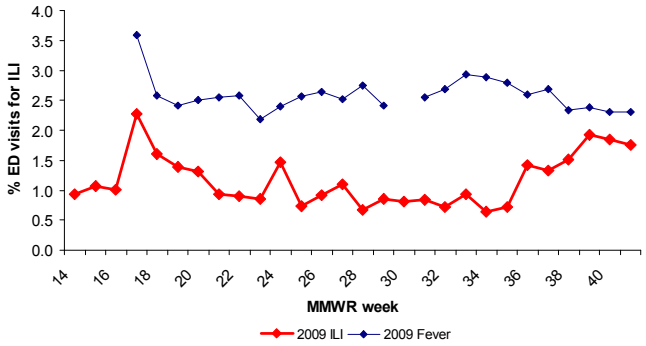


Surveillance Information

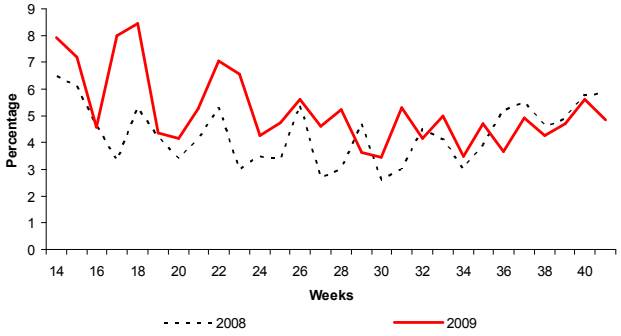
Outpatient Visits for Influenza-like Illness – Maine, 2008-09



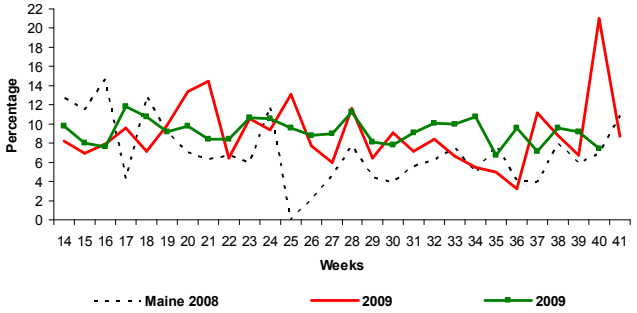
Emergency Department Visits for ILI at Eight Hospitals – Maine, 2009



Hospital Admissions Due to Pneumonia or Influenza – Maine, 2007-09



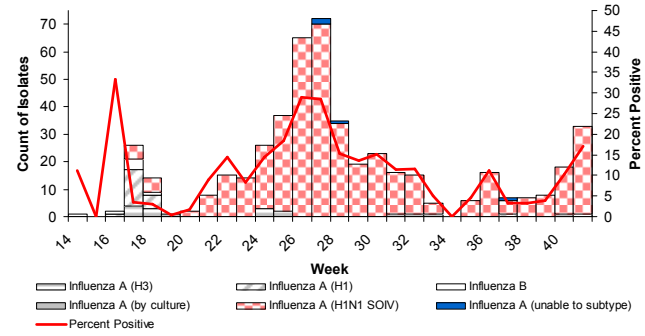
Percentage of Deaths Attributable to Pneumonia or Influenza – Maine, 2007-09



Lab Data

- 5,051 influenza tests have been performed since April 27, 2009
  - 8.7% of tests have been positive for H1N1

Respiratory Specimens Positive for Influenza from HETL – Maine, 2009



Positive Rapid Influenza Tests – Maine, 2009